MANUAL TRAINING IN PRIMARY GRADES.

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ONE may enter the University of Chicago at the age of three, and at this time his work in manual training begins.

The kindergarten during the past year has furnished its doll-house with tables, chairs, beds, and cupboards. Saws, hammers and nails, with small blocks and pieces of wood, were used, and many small busy hands, with absorbed interest on the part of the diminutive owners, were the means by which the furnishing was accomplished. In the springtime stakes were made for their gardens; "the most satisfactory stakes ever used" being the verdict of their teacher.

In the first grade the underlying thought of last year's work was food supplies and the industries pertaining thereto. In October a farm was planned. The children decided upon a house and barn, a milk-house and a corn-crib, to be made of wood. In time fences were added, and two wagons, bridges for the stream, and some improvements upon the house and barn. At the conclusion of the first lesson in planning the farm, one very small boy added nonchalently: "And don't you think it would be rather nice to lay out a little golf ground?" The dimensions of the farm were determined by the size of the available sand-table, and the buildings were made to scale. It was distinctly a community project, each one having his part to do. Seven children made the seven pieces of the house, each one drawing on a paper, with ruler, the pattern of the piece he was to make, to exact size, and from that pattern making the same piece in wood, using quarter-inch bass. Each child had the privilege of nailing his piece to the part that came next, and in this manner the buildings were all completed. After the buildings were laid out upon the sand-table, the animals were added as suggested by the children. Dogs, sheep, cows, horses, and even a woman churning, were

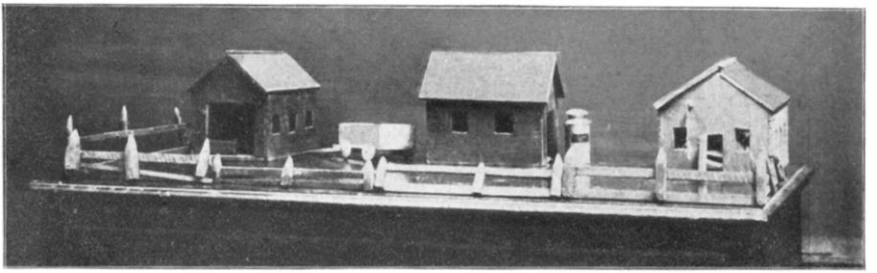
made from clay, and all helped to lend interest and reality to the work.

The constructive work of the second grade called for clay and textiles as working material, except for the wooden trowels for gardening. These were triangular pieces of wood, sharpened on the edges, with handles nailed to them.

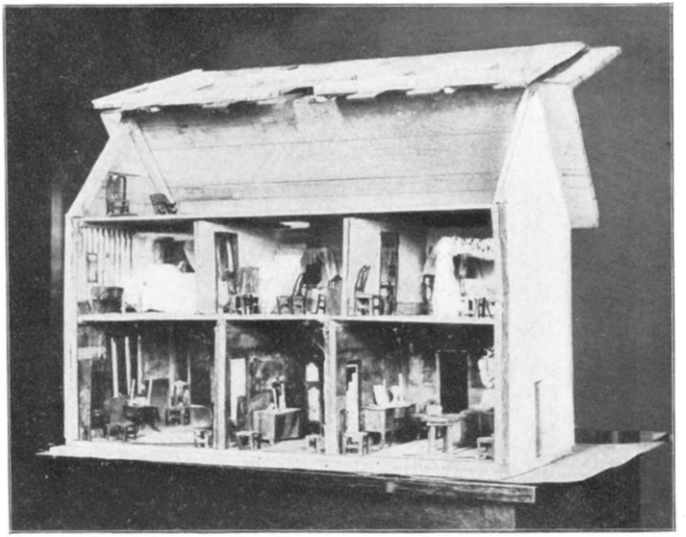
Early in the year the third grade was particularly interested in the more primitive peoples, and especially in their means of transportation by land or sea. After some discussion on the subject of transportation by land, each one of the class drew a plan of the vehicle he would make, if he were confined to the materials these primitive people had at command — logs, the bark and boughs of trees, leather, and strong grasses. It was decided that holes might be bored by using the auger bit, since the pieces of wood used were too small to be bored by the use of fire or crude tools. The results were most interesting when worked out, improvements suggesting themselves to the children as the actual materials were worked upon. The principles of both the wagon and wheelbarrow were seen in the results, and when the springtime came, the planning and making of two wagons and two wheelbarrows suitable for their gardening came only as a more elaborate working-out of the principles already mastered. During the winter the life and adventures of the vikings of the Northland, and of Ulysses of the southern country, were a basis for much of the constructive work of the grade. Armor and weapons typical of the two peoples were made; designs for boats were drawn and worked out of cardboard, with appropriate designs on the sails — the fiery dragon for the viking boat, and a beautiful Grecian border for the boat of Ulysses, with its bird-head at the prow.

The fourth grade studied the early colonial history of Virginia, and during the winter laid out on the sand-table Jamestown and the surrounding country, making the small town of cardboard, clay, and sticks. The Indian village was also built, using birch bark, cardboard, sticks, and raffia. It was a natural outgrowth of this to build the colonial house of that locality and period. Each one of the children had his distinct part in this

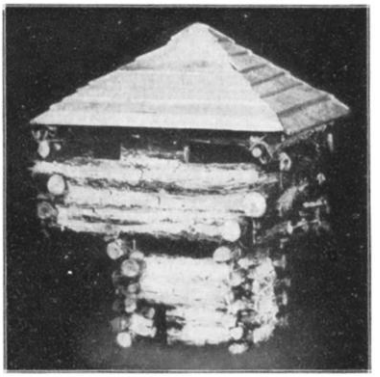
building, with its six rooms and attic, its hardwood floors, its fireplaces, the outlying houses, and slave quarters. The furniture was made of paper to the definite scale of an inch to a foot. In connection with their study of milk and its properties, in domestic science, the class made a cheese-press, in which fifteen cheeses were made at one time.



FIRST GRADE FARM BUILDINGS.



PLANTATION HOUSE, MADE AND FURNISHED BY THE FOURTH GRADE.



FORT DEARBORN, FOURTH GRADE.